

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

#4

In re Application of:

Group Art Unit: Unknown

STERK

Examiner: Unknown

Serial Number: 10/523,111

International Application Number: PCT/EP2003/008724

Filing Date: February 3, 2005

International Filing Date: 06 August 2003 (06.08.2003)

Title: PIPERIDINE-PYRIDAZONES AND PHTHALAZONES AS PDE4 INHIBITORS

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

An Information Disclosure Statement is submitted herewith pursuant to 37 C.F.R. 1.97-1.98. Please note the following particulars: [NOTE: One only of items a, b, c, and d must be checked.]

- [XXX] a. The enclosed statement is being filed within three months of the filing date of a national application, or within three months of the date of entry into the national stage as set forth in 37 C.F.R. 1.491 in an international application, or before the mailing date of a first Office Action on the merits, whichever event occurs last.
- [ ] b. The enclosed statement is being filed after a first action on the merits but before the mailing date of a final action under 37 C.F.R. 1.113, or a notice of allowance under 37 C.F.R. 1.311.  
The enclosed statement is accompanied by [check one]:  
[ ] i. a certification in part (e) below as specified in 37 C.F.R. 1.97(e), or  
[ ] ii. a check in the amount required by 37 C.F.R. 1.17(p).
- [ ] c. The enclosed statement is being filed after the mailing, date of a final action under 37 C.F.R. 1.113, or a notice of allowance under 37 C.F.R. 1.311, but before payment of the issue fee.  
[ ] Certification report(e) below; and  
[ ] a check in the amount as required by 1.17(p).
- [ ] d. The enclosed statement is being filed pursuant to 37 C.F.R. 1.97(i), for placement in the file.
- [ ] e. Certification [Check one] [Certification is required only if box (b)(i) or box (c) is checked.]

[ ] I hereby certify that each item of information contained in the enclosed Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this statement,

or

[ ] I hereby certify that no item of information in the enclosed Information Disclosure Statement herewith was cited in a communication from a foreign patent office in a counterpart foreign application, or, to my knowledge after making reasonable inquiry, was known to any individual designated in 37 C.F.R. 1.56(c) more than three months prior to the filing of this Information Disclosure Statement.

or

[ ] Appropriate certification is attached.

[XXX] f. If no check is enclosed and a fee is due in connection with this communication or if the check enclosed is insufficient, the Commissioner is authorized to charge any fee or additional fee due in connection with this communication to Deposit Account No. 14-0112.

[XXX] g. Copies of the documents are attached herewith with a completed Form PTO-1449.

or

[ ] Copies of the documents are not attached as allowed under CFR 1.98(d)(1)(2). The earlier application is identified as:

and/or

[XXX] Copies of US Patents/Publications not attached as allowed in Official Gazette Aug. 5, 2003/ Vol. 1273, no. 1.

The Examiner is respectfully requested to cite the documents listed on the attached Form PTO-1449 in the next Office Action. In so doing, the Examiner is respectfully requested to initial in the space adjacent to the listing of each document on the Form PTO-1449, and return a copy of the initialed Form PTO-1449 with the next communication to Applicants, to confirm that these documents have been considered by the Examiner and made of record in this application.

If the Examiner has any questions or wishes to discuss this application, kindly telephone the undersigned at the below-listed number.

Respectfully submitted,

**NATH & ASSOCIATES PLLC**

Date: *April 28*, 2005

By: 

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#4

<b>FORM PTO-1449</b>  <b>INFORMATION DISCLOSURE CITATION</b>	Attorney Docket: 26462U	Serial Number: 10/523,111  Filing Date: February 3, 2005
	Inventor: STERK	Group Art Unit: Unknown

U.S. PATENT DOCUMENTS							
Exam. Initial		Document Number	Issue Date	Name	Class	Sub-Class	Filing Date
	A1	5,376,656 A (corresponds to WO 92/06963)	27 Dec. 1994	Amschler			16 Apr. 1993
	A2	2004/0127707 A1 (corresponds to PCT/EP02/04438; WO 02/085906)	01 Jul. 2004	Sterk			23 Apr. 2002
	A3	2004/0067946 A1 (corresponds to PCT/EP02/01547; WO 02/064584)	08 Apr. 2004	Grundler et al.			14 Feb. 2002
	A4	2004/0132721 A1 (corresponds to PCT/EP02/04494; WO 02/085885)	08 Jul. 2004	Grundler et al.			24 Apr. 2002
	A5	5,716,954 A1 (corresponds to WO 93/07146 A1)	10 Feb. 1998	Wilhelm et al.			05 Jan. 1995
	A6	6,103,718 A (corresponds to WO 98/31674 A1)	15 Aug. 2000	Sterk			14 Jul. 1999
	A7	6,380,196 B1 (corresponds to WO 99/31090 A1)	30 Apr. 2002	Ulrich et al.			03 Aug. 2000
	A8	6,255,303 B1 (corresponds to WO 99/47505 A1)	03 Jul. 2001	Sterk et al.			13 Sep. 2000
	A9	6,756,371 B1 (corresponds to WO 01/30766 A1)	29 Jun. 2004	Sterk			12 Apr. 2002
	A10	6,544,993 B1 (corresponds to WO 01/30777 A1)	08 Apr. 2003	Sterk			12 Apr. 2002
	A11	2003/0195215 A1 (corresponds to PCT/EP01/06230; WO 01/94319 A1)	16 Oct. 2003	Sterk			01 Jun. 2001

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		Document Number	Date	Country	Class	Sub-Class	Translation
	A12	0 763 534 A1	19 Mar. 1997	EP			Abstract
	A13	94/12461 A1	09 Jun. 1994	WO			N/A
	A14	98/31674 A1	23 Jul. 1998	WO			N/A
	A15	01/94319 A1	13 Dec. 2001	WO			N/A
	A16	01/19818 A1	22 Mar. 2001	WO			N/A
	A17	01/30777 A1	03 May 2001	WO			N/A
	A18	01/30766 A1	03 May 2001	WO			N/A
	A19	99/47505 A1	23 Sep. 1999	WO			N/A
	A20	99/31090 A1	24 Jun. 1999	WO			N/A
	A21	99/31071 A1	24 Jun. 1999	WO			N/A
	A22	93/07146 A1	15 Apr. 1993	WO			N/A
	A23	02/085906 A2 + A3	31 Oct. 2002	WO			N/A
	A24	02/085885 A1	31 Oct. 2002	WO			N/A
	A25	02/064584 A1	22 Aug. 2002	WO			N/A
	A26	92/06963 A1	30 Apr. 1992	WO			Abstract

Examiner	Date Considered
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EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP ' 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

FORM PTO-1449

Attorney Docket:  
26462U

Serial Number: 10/523,111

Filing Date: February 3, 2005

## INFORMATION DISCLOSURE CITATION

Inventor:  
STERK

Group Art Unit: Unknown

## U.S. PATENT DOCUMENTS

Exam. Initial	Document Number	Issue Date	Name	Class	Sub- Class	Filing Date
A27						

## FOREIGN PATENT DOCUMENTS

Document Number	Date	Country	Class	Sub- Class	Translation
A28					

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

A29	Coates, W.J., et al., "1,4-Bis(3-oxo-2,3-dihydropyridazin-6-yl)benzene Analogues: Potent Phosphodiesterase Inhibitors and Inodilators", <u>J. Med. Chem.</u> , Vol. 33, Pp. 1735-1741, (1990).
A30	Sotelo, E., et al., "Pyridazines. Part 25: Efficient and selective deprotection of pharmacologically useful 2-MOM-pyridazinones using Lewis acids", <u>Tetrahedron Letters</u> , Vol. 42, Pp. 8633-8636, (2001).
A31	Van der May, M., et al., "Novel Selective PDE4 Inhibitors. 1. Synthesis, Structure-Activity Relationships, and Molecular Modeling of 4-(3,4-Dimethoxyphenyl)-2H-phthalazin-1-ones and Analogues", <u>J. Med. Chem.</u> , Vol. 44, Pp. 2511-2522, (2001).
A32	Van der May, M., et al., "Novel Selective PDE4 Inhibitors. 2. Synthesis and Structure-Activity Relationships of 4-Aryl-Substituted <i>cis</i> -Tetra- and <i>cis</i> -Hexahydrophthalazinones", <u>J. Med. Chem.</u> , Vol. 44, Pp. 2523-2535, (2001).
A33	Van der May, M., et al., "Novel Selective Phosphodiesterase (PDE4) Inhibitors. 4. Resolution, Absolute Configuration, and PDE4 Inhibitory Activity of <i>cis</i> -Tetra- and <i>cis</i> -Hexahydrophthalazinones", <u>J. Med. Chem.</u> , Vol. 45, Pp. 2526-2533, (2002).
A34	Van der May, M., et al., "Novel Selective PDE4 Inhibitors. 3. <i>In Vivo</i> Antiinflammatory Activity of a New Series of N-Substituted <i>cis</i> -Tetra- and <i>cis</i> -Hexahydrophthalazinones", <u>J. Med. Chem.</u> , Vol. 45, Pp. 2520-2525, (2002).

Examiner

Date Considered

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